Examiner My-Chau T. Tran

Group art Unit: 1639

Attorney Docket No. 30626-101

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for the analysis of a sample comprising:

(a) depositing a continuous film having optical properties and species adsorption properties

essentially the same as optical properties and species adsorption properties of bulk material of

the continuous film;

(b) applying, after deposition of the continuous film, the sample to said deposited continuous

film by either adsorption or directly to a surface of said deposited continuous film; and

(c) analyzing the sample by matrix-less light desorption/ionization mass spectroscopy, after the

sample has been applied to the deposited continuous film.

2. (Previously Presented) A method according to claim 1, wherein said sample is selected from

the group consisting of organic chemical compositions, inorganic chemical compositions,

biochemical compositions, drugs, drug metabolites, cells, cell material, micro-organisms,

peptides, polypeptides, proteins, lipids, carbohydrates, nucleic acids, and combinations thereof.

3. (Previously Presented) A method for sample analysis according to claim 2, further

comprising obtaining said sample from the group consisting of: a fluidic system, a

microfluidic system, a nanofluidic system, a micro chromatographic system, a nano

chromatographic system, a high-throughput isolation and preparation system, and combinations

thereof.

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4-5 (Canceled)

6. (Previously Amended) A method according to claim 1, wherein said deposited film selected

from the group consisting of: silicon, germanium, carbon, hydrogen and mixtures thereof.

7. (Previously Amended) A method according to claim 1, wherein the material used as said

deposited continuous film is selected using criteria selected from the group consisting of light

reflection, optical absorption, species absorption, analyte adsorption, ambient adsorption, analyte

drying, and combinations thereof.

8. (Canceled)

9. (Canceled)

10. (Previously Amended) A method according to claim 1, further comprising, physically or

chemically modifying said continuous film, surface functionalizing said continuous film, or

patterning said continuous film prior to analyzing said sample.

11. (Previously Amended) A method according to claim 10, wherein patterning said continuous

film is by: lithography comprising photolithography, probe, contact printing, imprinting, soft

lithography; stamping; screen masking; printing or physically modifying said film or a

subsequently positioned sample.

12. (Previously Presented) A method according to claim 10 wherein said physically or

chemically modifying comprises reaction with or adherence with organic or inorganic

compounds, cells, cell components, tissues, microorganisms and combinations thereof.

13. (Canceled)

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14. (Previously Presented) A method according to claim 1, wherein analyzing said sample is by

laser desorption-ionization mass spectroscopy.

15. (Previously Presented) A method according to claim 1, wherein prior to analyzing said

sample, a signal enhancing agent is integrated with said sample.

16. (Previously Presented) A method according to claim 15 wherein said signal enhancing agent

is ammonium citrate.

·17. (Previously Amended) A method according to claim 1, wherein applying said sample to said

continuous film is by either (a) absorbing from a solid, liquid or gas; or (b) directly applying to

the surface of said deposited continuous thin film as a solid or liquid, or combination thereof.

18. (Previously Presented) A method according to claim 17 wherein said sample is obtained

from a separation means selected from at least one of the group consisting of: chemical, physical,

and electrical separation means.

19. (Previously Presented) A method according to claim 18 wherein said separation means is

selected from at least one of the group consisting of: liquid chromatography, gas

chromatography, deposited thin film chromatography, size exclusion chromatography, affinity

chromatography, gel electrophoresis, capillary or micro-capillary electrophoresis, and blotting.

20 - 21 (Canceled)

22 - 65 (Canceled)

66. (Previously Amended) A method according to claim 1, wherein said deposited continuous

film is deposited on a substrate selected from the group consisting of silicon, semiconductors,

insulators, glasses, plastics, polymers, metals, ceramics, and combinations thereof.

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67. (Previously Amended) A method according to claim 1, wherein said deposited continuous

film is deposited by chemical vapor deposition, physical vapor deposition, plasma enhanced

chemical vapor deposition, hot wire deposition, nebulization, evaporation, sputtering, casting,

spin coating, and combinations thereof.

68. (Canceled)

69. (Previously Presented) A method according to claim 2, wherein said sample is a gas, liquid,

solid, or combination thereof found in the general indoor environment, general outdoor

environment, a process environment, and equipment environment.

70. (Previously Presented) A method according to claim 2, wherein said sample is a cell,

plurality of cells, tissue, components thereof, and combinations thereof.

71-118 (Canceled)

119 -124. (Withdrawn)

125. (Previously Presented) The method of claim 1 wherein said deposited continuous film

comprises a semiconductor film.